city of Lake City

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September 24, 2008

Bill Storm, Project Manager
Minnesota Department of Commerce Office of Energy Security
85 7th Place East, Suite 500
Saint Paul, MN 55101-2198

Dear Mr. Storm:

This letter supplements remarks delivered by Mr. Andru Peters on my behalf at the Public Information Meeting in the Matter of the Northern States Power Company (Xcel Energy) Certificate of Need Applications and Site Permit Application on September 10, 2008 in Red Wing, Minnesota.

Concerns for the Lake City community that emerged from conversation at meetings of both the Lake City Utility Board and Lake City Common Council are a follows:

1. Long-term storage of nuclear waste
2. Thermal impact of service water discharge on the Mississippi River and Lake Pepin.

We ask that the best available water dispersion modeling be used to assess the natural ecosystem and cultural impacts of thermal discharge and that there be a plan put in place to mitigate adverse impacts. What follows is expanded development of our concerns related to thermal impacts. We recognize Lake Pepin, the Mississippi River, and its tributaries as interacting components of the world's third largest river system. The thermal plume of any water discharge has potential to impact:

Vertebrates and invertebrates. A thermal plume can have direct impacts such as changes in distribution of aquatic organisms (e.g. attracting fish to warmer water during winter), or cause indirect impacts such as increased exposure to predators (e.g. through concentrating prey fish in warmer waters during winter).

Ice. A thermal plume can affect the characteristics of ice or the length of the ice cover season on Lake Pepin. It is a safety consideration, but also cultural in that recreation on the ice is a long-standing community tradition that could be altered because of safety concerns.

Distribution of Sediment. A thermal plume can affect the hydrodynamics of a river which

then affect the distribution of sediment in the immediate channel and downstream. Water temperature affects the ability of water to carry sediment (colder water can carry more). The Pollution Control Agency, acting as it is legally required to do under the federal Clean Water Act, is working to develop a Total Maximum Daily Load (TMDL) for Lake Pepin. It is a restoration project with set goals for the dose of pollution that the river system can handle and still be used for specific purposes such as drinking water, fishing or swimming.

Dissolved Oxygen. Water temperature affects dissolved oxygen levels. Increasing water temperature decreases water's ability to carry oxygen.

Endocrine Disruptors. If a thermal plume interacts with a municipal wastewater discharge plume, organisms (e.g. catfish, smallmouth bass) congregating in the warmer water may be subject to prolonged exposure to chemicals such as those found in birth control pills.

Phytoplankton and Zooplankton. Heat can result in increased production of organisms that ultimately can lead to a decrease in light and oxygen in the river and in Lake Pepin.

Parasites. Thermal effluent has been reported to influence the prevalence and abundance of parasites of fish.

As a result of these potential impacts and affects, we ask that changes in seasonal mean temperature be assessed related to the facility upgrade for the entire dispersion plume, both in the main channel of the Mississippi River and on each shore of Lake Pepin.

Please feel free to contact me if you have any questions. I can be reached at (651)345-5383, extension 118 or at khimanga@embarqmail.com.

Sincerely,

Katie Himanga

Katie Himanga
Mayor